

# Frog Diversity

Week 3

## Words of the day

- Endo – (prefix) within, inside
- Periople – thin outer layer of hoof of equines
- Pendent – hanging down
- Mala – cheek, in vertebrates, and corresponding region of head in invertebrates
- Loma – thin membranous flap forming a fringe round an opening

# Frog of the Week

- Genus *Ceratophrys*
- 8 species in genus
- Rainforests of South America
- Pacman frogs
- <https://www.youtube.com/watch?v=6AILF4Spwpo>



# Frog Facts

- Frogs usually eat their dead skin after shedding it
- One gram of toxin produced by the skin of the golden poison dart frog could kill 100,000 people
- Weird group names: murder of crows, a parliament of owls, and an army of frogs
- Most frogs have teeth only on the upper jaw
- The biggest frog in the world is the Goliath frog, can be up to a foot in length and weigh more than half a stone

# Semester Ahead

- Salamanders and caecilians (Week of 28<sup>th</sup>)
- Lizards and snakes (Week of 5<sup>th</sup>)
- Exam 1 for class – October 2<sup>nd</sup>

## General Visible Characteristics

- No distinct neck region.
- Trunk shortened.
- Adults without tail.
- Hindlimbs w/ 4 segments.
- Hindlimbs longer than forelimbs.
- Eyes well developed.
- Tympanic membrane usually present



*Agalychnis callidryas*  
Kim Taylor (Ranger Rick 1991)

# No distinct neck region

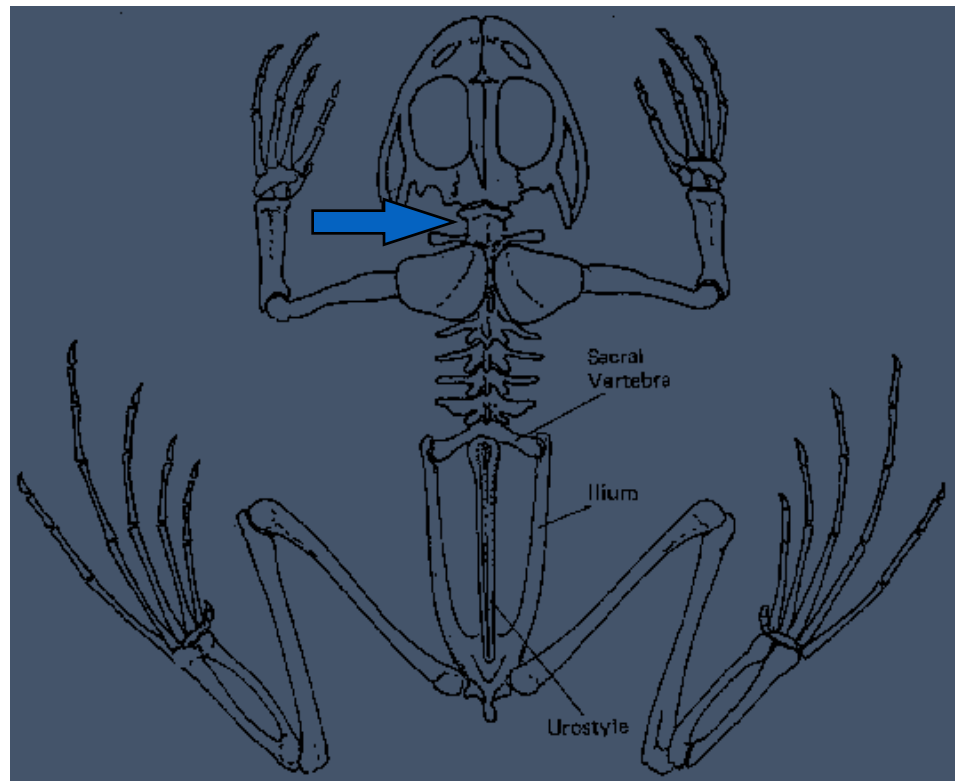


Figure 3-16. Page 65. Pough et al. 2001

Trunk shortened  
(5-9 presacral vertebrae)

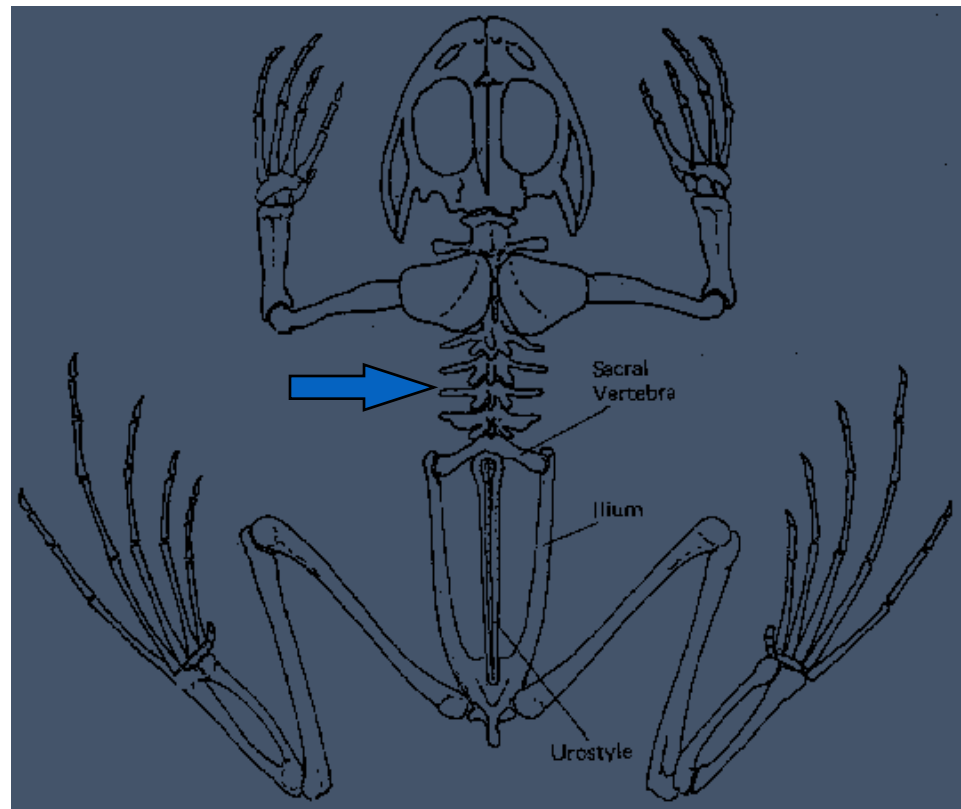


Figure 3-16. Page 65. Pough et al. 2001



Postsacral vertebrae fused to form  
urostyle

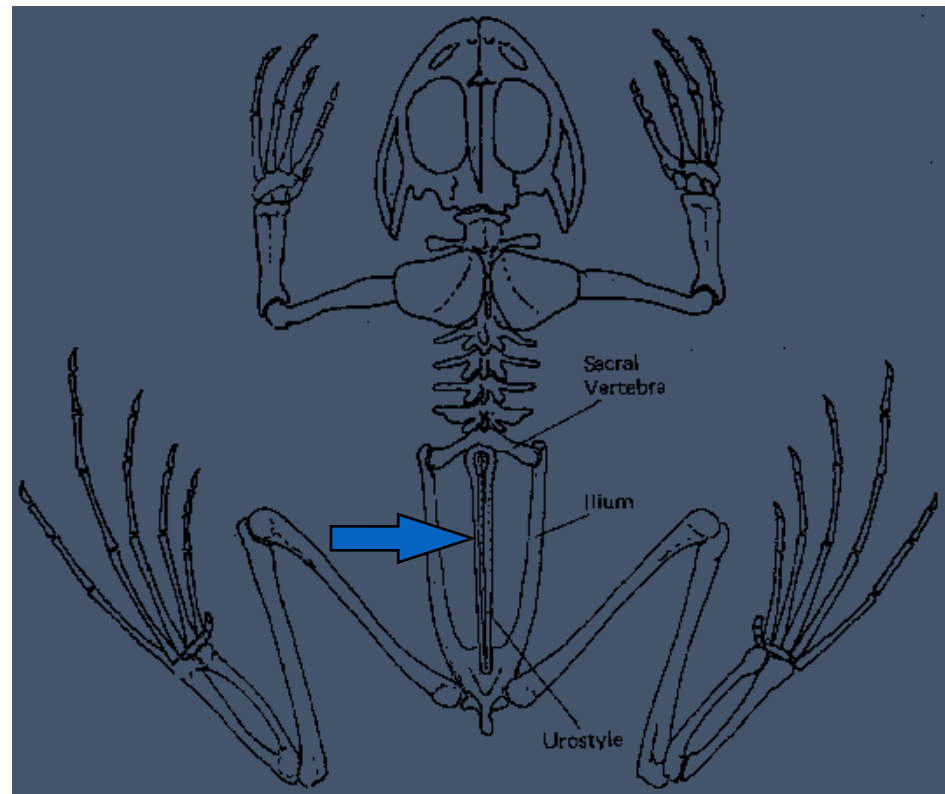


Figure 3-16. Page 65. Pough et al. 2001

Adult lacks a tail

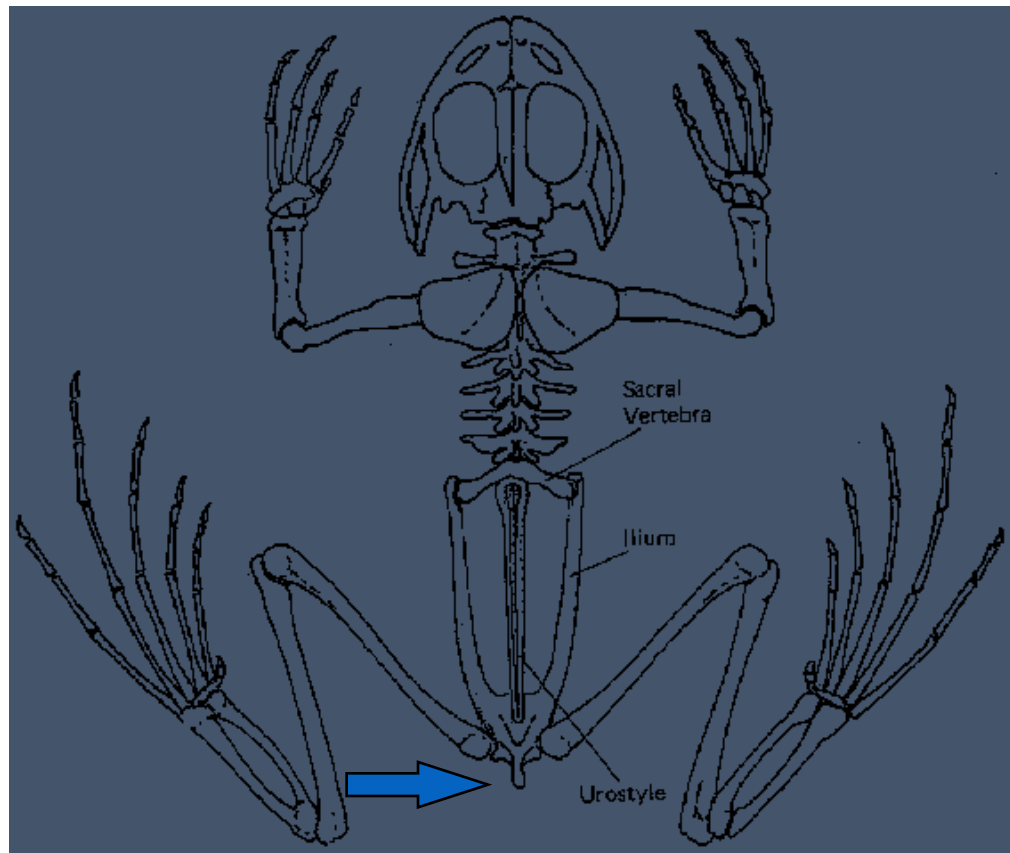


Figure 3-16. Page 65. Pough et al. 2001.

Iliac portion of pelvic girdle elongated

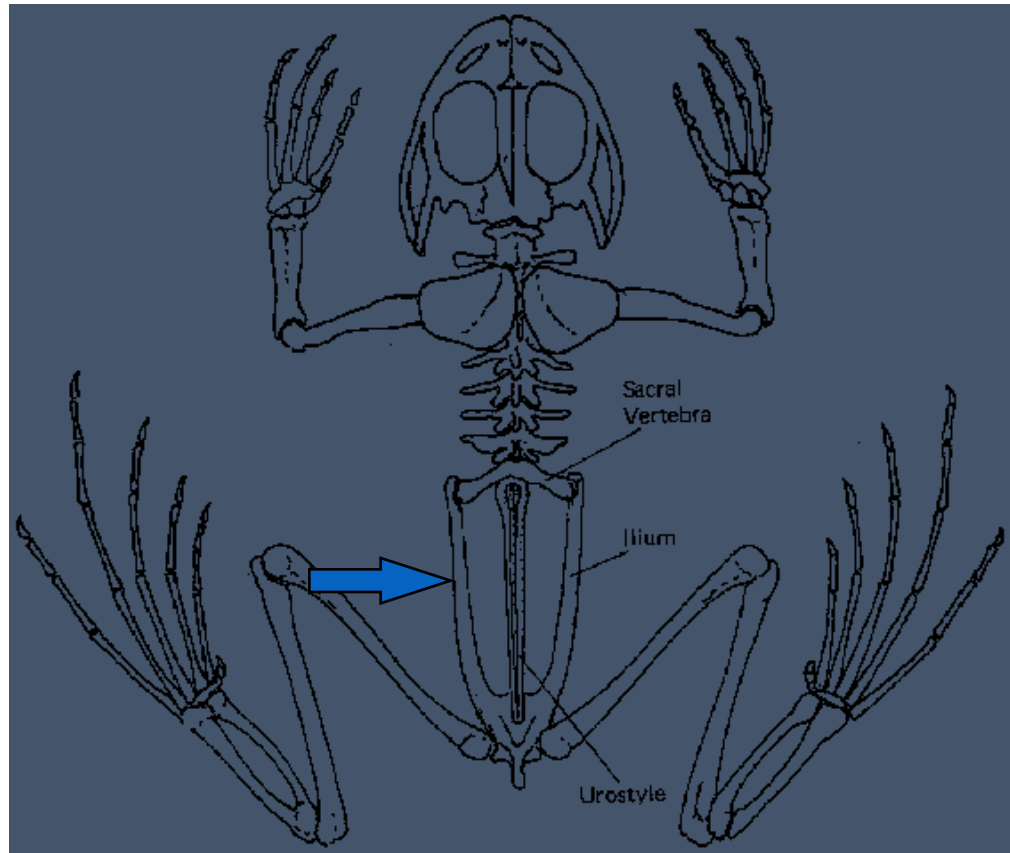


Figure 3-16. Page 65. Pough et al. 2001.

Hindlimbs with four segments;  
much longer than forelimb

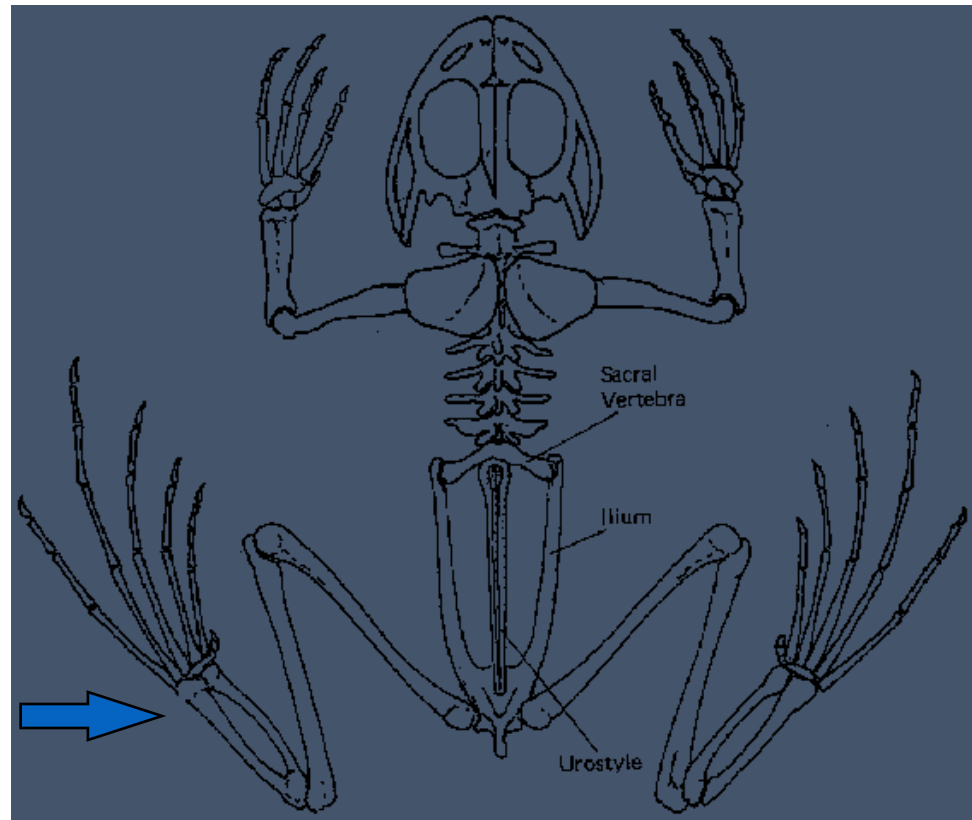


Figure 3-16. Page 65. Pough et al. 2001

Radius fused to ulna;  
tibia fused with fibula

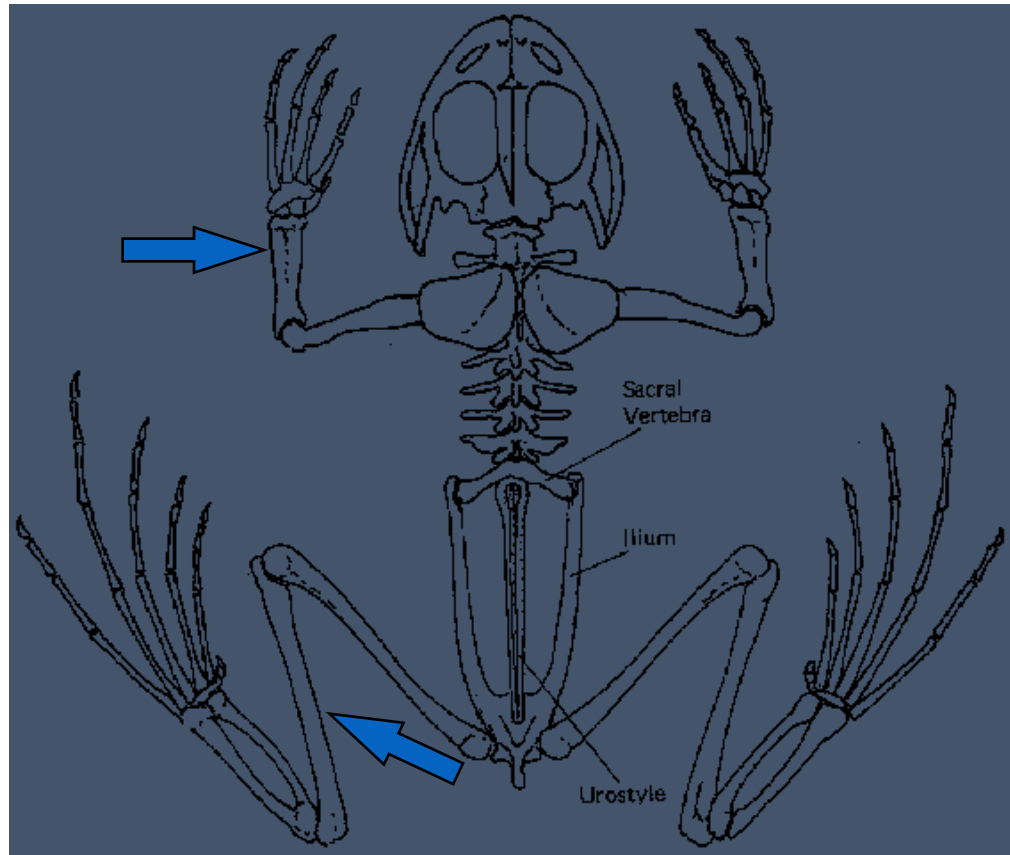
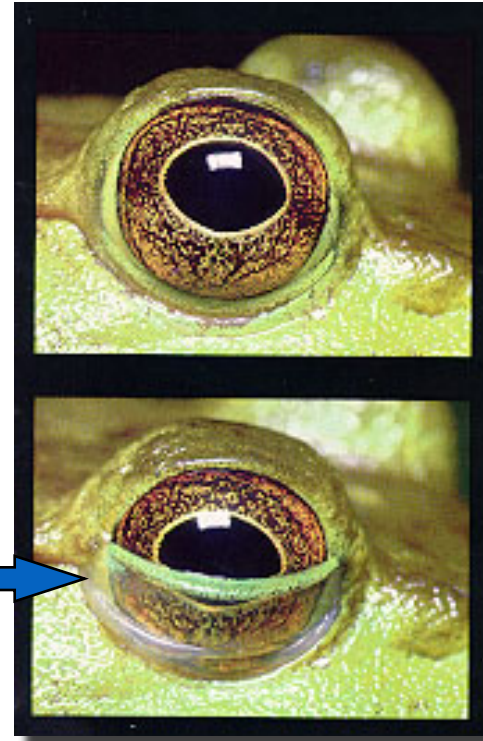


Figure 3-16. Page 65. Pough et al. 2001

Eyes well developed;  
movable eyelid

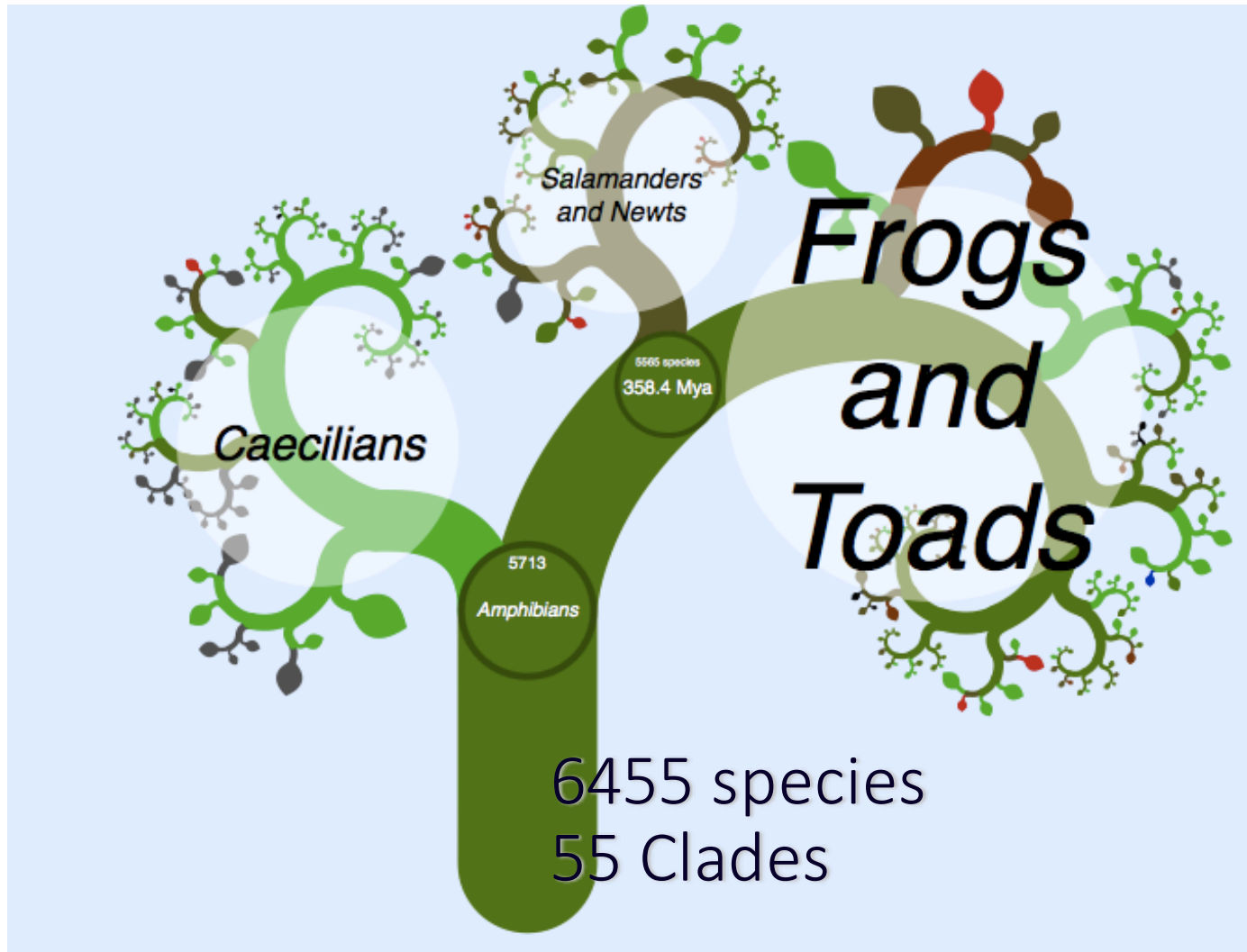
Nictitating membrane



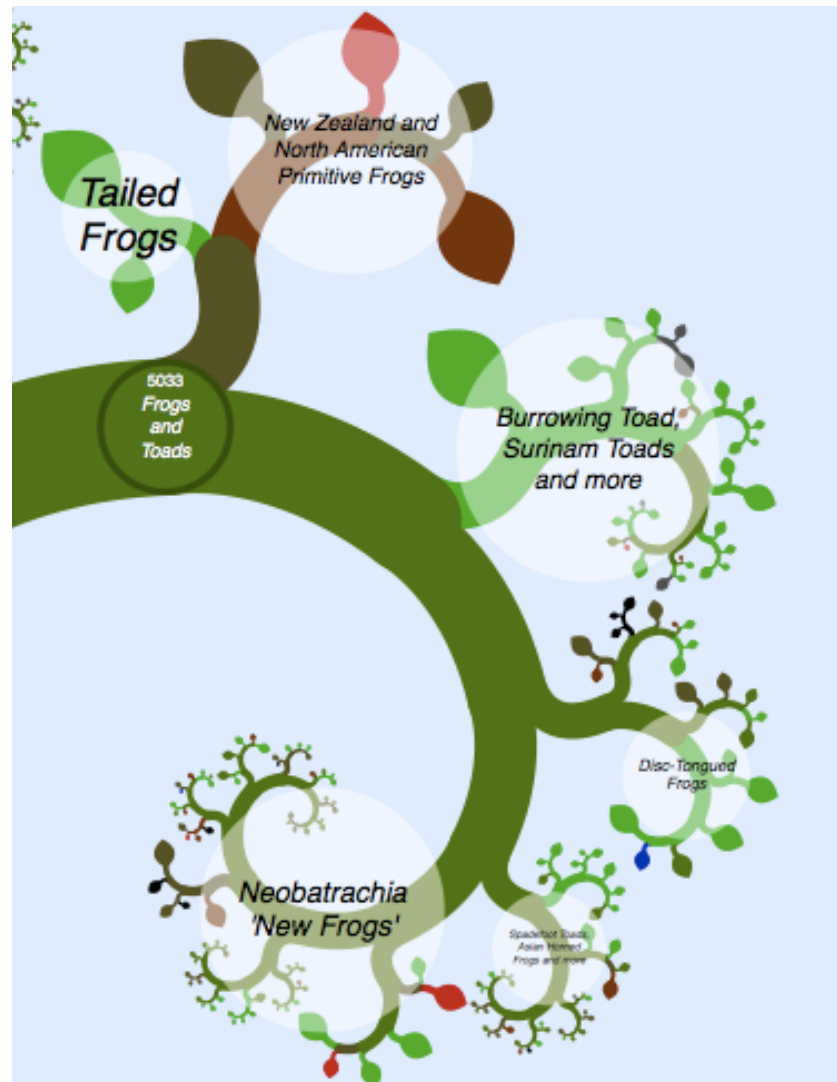
Dwight R. Kuhn  
(Ranger Rick 1991)

# Global Distribution of Anura



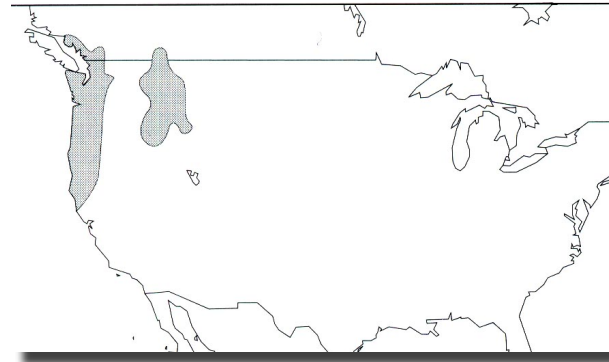






**\*Ascaphidae**  
Tailed frogs

1 Genus 2 Species



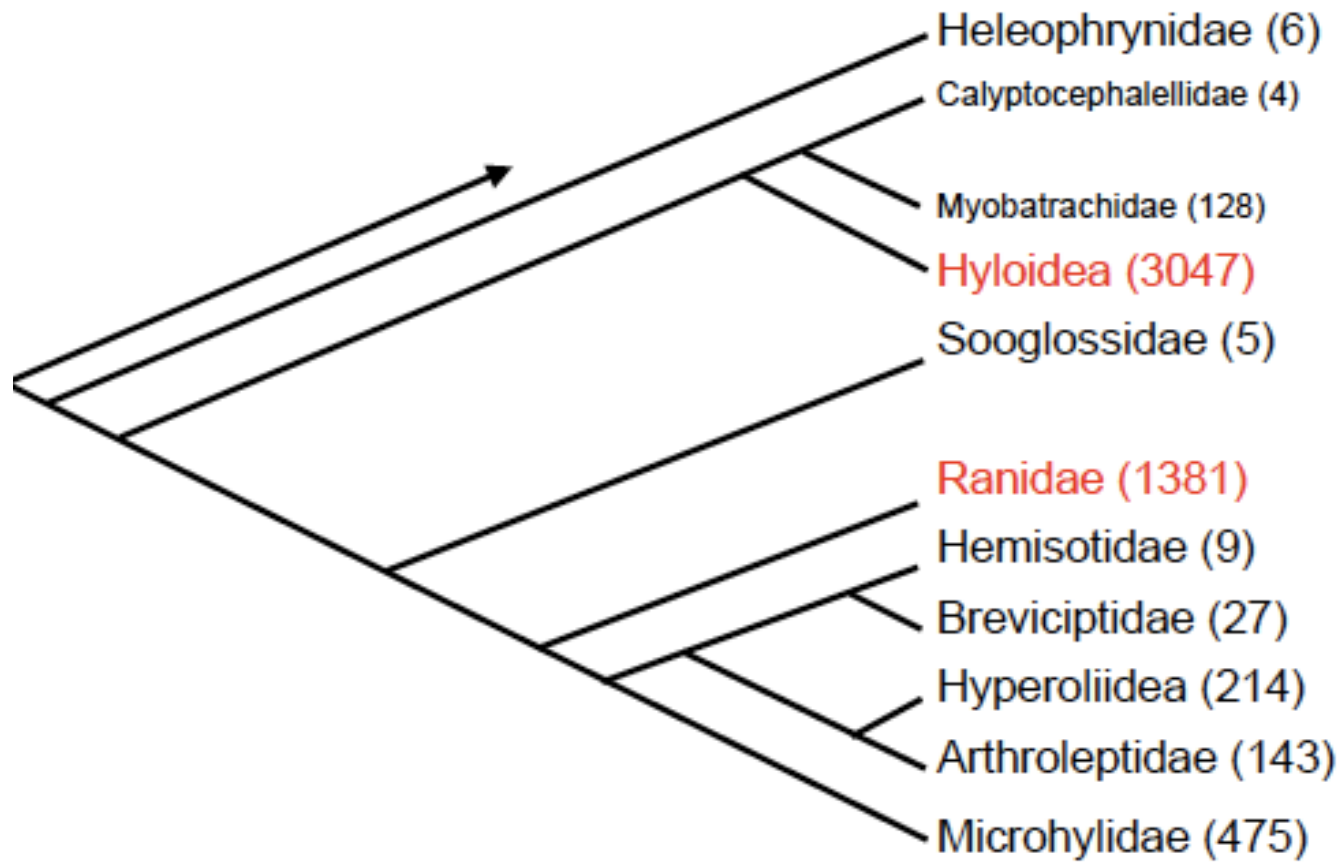
- Most basal frog (Jurassic)
- Internal fertilization (tail extension of cloaca)
- Require cold, swift streams
- Larvae modified oral discs



45 Families



Neobatrachia (5281)



# Differences

- Determine the family of each frog (Write the station number with species name)
- Write a paragraph (6ish sentences) that describes the key differences between the families directly above and below on the phylogeny
- Write a paragraph (6ish sentences) about one of the families not represented today at the stations
- Question:
- What are three differences between frogs and toads and what are two similarities?

## Next Week

- Turn in differences between families
- Turn in question
- There will be no quiz next week, study for the test
- Learn the family and species names of the stations for a future quiz
- We will be learning about Salamanders and caecilians